Michigan Department of Transportation 5100B (02/06)

# CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

PROJECT MANAGER			JOB NUMBER (JN)	CONTROL SECTION (CS)
DESCRIPTION IF NO JN	I/CS			
MDOT PROJECT MANAGER: Check all items to be included in RFP.  WHITE = REQUIRED  GRAY SHADING = OPTIONAL			CONSULTANT: Provide only checked items below in proposal.	
Check the appropriate Tier in the box below				
TIER I (\$25,000-\$99,999)	TIER II (\$100,000- \$250,000)	TIER III (>\$250,000)		
			Understanding of Service	
			Innovations	
			Safety Program	
N/A			Organization Chart	
			Qualifications of Team	
			Past Performance	
Not required as part of official RFP	Not required as part of official RFP		Quality Assurance/Quality Co	ontrol
			Location of Service Personn (Only check for on-site ins	
N/A	N/A		Presentation	
N/A	N/A		Technical Proposal (if Preser	ntation is required)
3 pages including cover sheet (No Resumes)	7 pages	19 pages	Total maximum pages for RF nel resumes	P not including key person-

## BUREAU OF HIGHWAYS REQUEST FOR PROPOSAL

for

## QUALIFICATIONS BASED SELECTION FOR PREQUALIFIED SERVICES

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is currently prequalified for this type of work and you are interested in providing services, please indicate your interest by submitting a Proposal. The Proposal must be submitted in accordance with the latest "Vendor Selection Guidelines for Service Contracts", available on the MDOT website.

For efficiency sake, we are asking that the vendor firm provide 3 paper copies of the Proposal to the MDOT project manager named in the attached scope of services.

These copies must be received by 3:00 P.M., **May 19, 2006.** Fax and electronic copies are not acceptable.

In addition, provide one unbound copy to:

#### Regular Mail:

Secretary, Operations Contract Support Michigan Department of Transportation P.O. Box 30050 Lansing, MI 48909

OR

## Overnight Mail:

Secretary, Operations Contract Support Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933

This copy is to be received within three working days after the due date and time specified above. Please do not deliver in person.

Any questions relative to the scope of services must be submitted by e-mail to the MDOT project manager. Any questions must be asked at least three working days prior to the due date and time specified above. All questions and their answers will be placed on the MDOT website as soon as possible after receipt of the questions. The names of vendors submitting questions will not be disclosed.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

#### **Michigan Department of Transportation**

#### **SCOPE OF SERVICE FOR:**

#### "AS NEEDED" CONSTRUCTION INSPECTION & TESTING SERVICES

#### **LOCATION:**

These projects will be at various locations throughout the Michigan Department of Transportation Metro Region. Most projects will be located within Wayne County.

The location of the Consultant office in relation to the Detroit TSC will be a consideration. Follow the guidelines detailed in Part V, Section E of the Vendor Selection Guidelines (January 2006)

## **CONTROL SECTIONS AND JOB NUMBERS:**

Various projects under the administrative responsibility of the Detroit Transportation Service Center (TSC).

## **Primary Prequalification Classification:**

**Road Construction Engineering** 

#### **Secondary Prequalification Classification:**

**Bridge Construction Engineering** 

#### PROJECT DESCRIPTION/PROJECT ENGINEER MANAGER DESIGNATION:

This Scope of Services is for possible use on all projects under the administration responsibility of the Transportation Service Center. The specific projects to be worked on will be at the direction of the Project Engineer Manager. All invoices submitted by the Consultant will be detailed to show each project worked on by control section and job number along with dates and hours per employee per each project.

#### GENERAL TIMETABLE

Anticipated Start Date:

Anticipated Completion Date:

June 1, 2006

June 1, 2007

ESTIMATED CONSTRUCTION COST: \$5,000,000.00

DBE Requirement: **0** %

MDOT Project Engineer Manager (PEM): Roger Teale, PE

**Detroit Delivery Engineer** 

Phone: 313-965-6350 Fax: 313-965-6340

The Consultant shall contact the Project Engineer Manager (PEM) prior to beginning any work on this Contract.

## **VENDOR SERVICE NOTES**

The following requirements and/or clarifications are in addition to the Standard Construction Engineer service contracts:

- 1. Many of the projects are on expedited schedules and the Contractor will be expected to work six days per week. The Vendor must demonstrate they have the qualified personnel available to meet the project schedule for the duration of the project. All vendor and sub-vendor staff shall be shown and be listed by name and responsibility in the organization chart. This chart must clearly define the vendor, sub-vendor and the chain of command.
- 2. The selected Vendor will report directly to the Department's construction staff members at the Detroit TSC. The Department construction staff will consist of the Delivery Engineer (PEM), an Assistant Delivery Engineer, and senior field inspectors (Construction Technicians 11 and 12).
- 3. The Department will be responsible for the administration of all projects for which the Vendor provides the construction engineering services. This solicitation is for "as-needed" services.
- 4. The fixed fee shall be 11%.
- 5. The Vendor shall contact the PEM prior to beginning any work on this Project. Vendor personnel are required to attend any meetings (design, partnering, preconstruction, progress, utility, or post construction meetings) as determined by the PEM.

The exact number of staff members (full or part time) will be coordinated with and determined by the PEM, and will be expected to fluctuate as required by the uncertain construction workload in the Detroit TSC and the capabilities of the Vendor supplied staff. Vendor principals/officers will not be included in the budgeted hours and are considered overhead expense. The total hours for this solicitation will not exceed XX total hours. The exact distribution of staff for these hours will be coordinated with and determined by the PEM.

## **GENERAL:**

The Vendor shall furnish all services and labor necessary to conduct and complete the asneeded Construction Engineering Services described herein. The Vendor shall also furnish materials, equipment, supplies, and incidentals necessary to perform the Services (other than those designated in writing to be furnished by the Department), and check and/or test the materials, equipment, supplies, and incidentals as necessary in carrying out

this work. The Services shall be performed to the satisfaction of the Department consistent with applicable professional standards.

- A. The Vendor's principal contact with the Department shall be through the designated PEM.
- B. The Services described herein are financed with public funds. The Vendor shall comply with all applicable Federal and State laws, rules, and regulations. The Vendor shall perform field operations in accordance with MIOSHA regulations and accepted safety practices. The Vendor shall wear personal safety equipment in accordance with MDOT policy while on the project.
- C. The Vendor agrees to demonstrate knowledge of, and performance in compliance with, the standard construction practices of the Department; the Project construction contract, proposal, and plans; the Standard Specifications for Construction and applicable publications referenced within; the Michigan Construction Manual; the Density Control Handbook, the Materials Sampling Guide; the Materials Source Guide, the Materials Quality Assurance Procedures Manual; and all other references, guidelines, and procedures manuals needed to carry out the work described herein in an appropriate manner.
- D. The Vendor shall notify the PEM, in writing, prior to any personnel starting work and any changes from those specified in the Vendor's original approved proposal. Any personnel substitutions are subject to review and approval by the PEM.
- E. The Vendor supplied personnel may be requested to train Department staff in addition to their assigned duties.

#### GENERAL DESCRIPTION OF CONSTRUCTION ENGINEERING SERVICES:

The Vendor shall provide, to the satisfaction of the Department, as-needed Construction Engineering Services as generally described herein: project administration; inspection; staking; quality control testing and reporting; measurement, computation, and documentation of quantities; reporting and record keeping; and assist in close out of project documentation; for construction work to be performed by the Construction Contractor for a duration as determined by the PEM.

## AS-NEEDED CONSTRUCTION ENGINEERING SERVICES TO BE PERFORMED BY THE VENDOR:

## A. For Project Administration and As-Needed Project Inspection, the Vendor shall:

1. **Inspectors**: Provide full and part time inspectors for the Projects consistent with the Department=s practice and in accordance with the Specifications, Plans, Proposal, the Michigan Construction Manual, the Materials Sampling Guide, and other applicable references, guidelines, and/or procedures manuals. The inspectors shall be technically qualified and experienced personnel to perform the Services required under the Agreement to avoid delay to the Construction Contractor.

- 2. **Coordination**: Provide appropriate coordination and contact, public relations, and cooperation with affected local, state, and/or federal agencies including the Department personnel, Federal Highway Administration; other Vendors and other Contractors; the general public; utilities and railroad companies; and local police, fire, and emergency services which may be affected by the Project as required by the PEM.
- 3. **Soil Erosion and Sedimentation Control:** A MDEQ certified NPDES Storm Water Operator may be assigned to inspect and document the project per the NPDES requirements. Any violations of the NPDES permit by the construction Contractor must be immediately reported to the PEM. Personnel performing inspection on areas where soil erosion and sedimentation control are needed must have completed the Soil Erosion and Sedimentation Control Training.
- 4. **Staking:** Perform staking in accordance with Department standards, including, but not limited to, staking to be performed by the MDOT Engineer as indicated in Section 104.08 of the 2003 Standard Specifications for Construction to ensure accuracy and compliance with the contract documents. This includes preliminary project staking (pre-staking) and construction verification staking. Inform the PEM of any plan errors, discrepancies or omissions identified by the Contractor and/or Vendor and make recommendation of any resolution. A majority of the pre-staking services will be performed by other Vendors and/or Department personnel prior to the start of construction.

In addition to the minimum verification staking indicated in the specifications and the MDOT Construction Manual, the Vendor shall verify the Contractor's bench loops, and verify the "as constructed" plan information provided by the Contractor and incorporate it into the final As-Constructed plans as deemed necessary by the PEM.

In addition to checks indicated in the specifications and the MDOT Construction Manual, the Vendor shall: field verify plan grades for sewer invert and outlet grades, top of casting grades, and ditch and other drainage grades; obtain cross section profiles at all connections to existing roadways and bridges to verify plan tie-ins; and check plan grades versus field verification at all bridges for underclearance as deemed necessary by the PEM.

- 5. **Progress:** Keep daily diaries, sketches, logs, photographs and records consistent with Department practice as may be needed to record the Contractor=s progress. Notify the PEM of any anticipated Contractor=s claim proposals or requests for extensions of time. Notify the PEM upon receipt of any Contractor=s claim proposals or requests for extensions of time.
- 6. **Changes/Extras/Adjustments**: Notify the PEM immediately of any unanticipated Project conditions and any changes, extras, or adjustments to the contract.
- 7. **Staff Reductions:** Withdraw any personnel or halt any services no longer required, at the request of the Department, or within the period of time as determined by the PEM, after the lack of need becomes apparent to the Vendor or the PEM. The Vendor will not be reimbursed for the cost of personnel charged to a project that the PEM has determined was unnecessary.

- 8. **Vendor Deliverables**: Collect, properly label or identify, and deliver to the Department any original diaries, logs, notebooks, accounts, records, reports, as constructed plans, photographs, other documents, and Project files prepared by the Vendor in the performance of the Agreement, upon completion or termination of the Agreement. Return, upon completion or termination of the Agreement, Specifications, Manuals, guides, written instructions, construction contracts and plans, unused forms, and any other documents and materials furnished by the Department. The Vendor may be responsible for replacing lost documents or materials at a fair and reasonable price.
- 9. **Equipment:** The Vendor may be required to furnish equipment as deemed necessary by the PEM, to perform the services as listed above and at no direct cost to the performance of these services.
- 10. **Final Inspection:** Make a final inspection of work in conjunction with Department personnel or such portions thereof eligible for acceptance, as soon as possible after notification by the Contractor that the work is completed or after the Vendor=s records show the work is completed. Notify the PEM in writing of particular defects to be remedied, if work is not acceptable to the Vendor. Invite the PEM and other Department personnel, as directed by current Department policy, to participate in the final inspection.
- 11. **Final Acceptance:** Ascertain that the Projects have been performed in accordance with the plans and specifications, or such modifications thereof as may have been approved. Invite the PEM and other Department personnel, as directed by current Department policy, to participate in the final acceptance.

## C. For Quality Control Testing and Reporting, the Vendor shall:

- 1. **Material Testing**: Sample and/or test materials (which may include off-site aggregates and bituminous plant testing) to be incorporated in the work, including but not limited to, concrete quality assurance testing, on site aggregate density testing and reporting, according to <u>Materials Sampling Guide</u>, and reject Contractor=s work and materials not meeting the Specifications, Plans, Proposal, the Michigan Construction Manual, Materials Quality Assurance Manual, and all other applicable references, guidelines, and procedures manuals. Determine the acceptability of materials found to be in non-compliance. Inform the PEM of non-compliance work and trends toward borderline compliance.
- 2. **Material Certification:** Make certain that acceptable test reports and material certifications from the supplier have been received for the project, prior to the incorporation of materials in the work, for materials tested off the Project site.
- 3. **Materials Reports:** Submit materials test reports (including, but not limited to Moisture and Density 582B, Inspector's Report of Concrete Placed 1174A, Aggregate Inspection Reports 1900 & 1901, Bituminous QA reports, and Concrete QA reports, etc.) according to the distribution list on a daily basis, within one work day following the testing. The efficiency of the Vendor in getting the "Moisture and Density Determination, Nuclear Method", Form 582B, copy to the Lansing,

Density Technology Unit, 8885 Ricks Road, Lansing MI 48909 will be measured by that unit and reported to the PEM.

4. **Testing Personnel:** For aggregate, concrete, density, and bituminous testing, utilize only personnel certified according to current Department requirements. Personnel will be certified on all projects (not just NHS projects).

The concrete testing inspector will be certified as a Concrete Technician Michigan Level I through a program certified by Michigan Concrete Association Board of Examiners or the Michigan Concrete Paving Association.

Any inspector involved in sampling or testing of Hot Mix Asphalt must be a Michigan Qualified Bituminous QC/QA Technician.

Any inspector performing sampling or testing of aggregates must be a current Michigan Certified Aggregate Technician.

Any vendor personnel performing density testing or handling of nuclear density testing equipment must have completed the Michigan Density Technology Certification Program, and successfully completed radiation safety training and use equipment regulated by the NRC and:

- 1. Possess a valid license issued by the NRC, or recognized Agreement State, for ownership and use of sealed sources contained within portable nuclear density gauges.
- 2. Provide the Department Radiation Safety Officer with a copy of the aforementioned license.
- 3. Comply with all rules and regulations set forth by Title 10 (Energy) and 49 (Transportation) of the Code of Federal Regulations.

Failure of any of the above will be found in non-compliance with the contract.

## D. For Measurement, Computation, Documentation, and Recordkeeping, the Vendor shall:

- 1. **Documentation:** Measure and compute quantities, and provide appropriate documentation of all materials incorporated in the work and items of work completed, and maintain an item record account. The consultant must obtain and be able to use the FieldManager Suite of Software for this project. Contact Info Tech, Inc at (352) 381-4400 or fax (352) 381-4444 or (www.fieldmanager.com) to obtain software and information on training. Since this software will be used on all MDOT projects in the future, the cost of this software can not be charged as a direct expense for this project. Consultants must keep their version of the FieldManager Suite of software current with the version being used by MDOT."
- 2. **Insufficient Tested Materials:** Track insufficient tested materials and notify the PEM and/or the Department office technician(s) on a bi-weekly basis.
- 3. **Maintain As-Constructed Plans** for the projects, showing any field changes, final utility locations, substantial quantity changes, etc. Verify the As-Constructed Plan information that is required to be provided by the Contractor. The PEM shall be contacted to determine which projects require the as-constructed plans and to

- coordinate the level of work required for each project. The PEM may request assistance in developing as-constructed plans for other projects in the Metro Region.
- 4. **Reports-Vendor Generated:** Prepare such periodic, intermediate and final reports and records as may be required by the Department and as are applicable to the Project, which may include, but are not limited to:
  - a. Inspector=s Daily Reports
  - b. Work Orders (Form1137)
  - c. Construction Item and Tested Material Records
  - d. Transfer of Tested Materials (Form 1178)
  - e. Monthly Report on Material Inspection (Form 1158)
  - f. Moisture and Density Determination Reports (Form 582BM)
  - g. Inspector's Report of Concrete Placed (Form 1174A-M)
  - h. NPDES Stormwater Operator Reports (Form 1126)
  - i. Labor Compliance, such as the Weekly Employment and OJT Report (Form 1199)
  - j. Mechanical Analysis (Form 1901)
  - k. Meeting Notes as required,
  - 1. Bi-Weekly Construction Progress Report (Form 1102A) and Weekly Statement of Working Days Charged (Form 1116), if applicable
  - m. Force Accounts
  - n. Contract Modifications (Recommendation / Authorizations)
  - o. Extension of Time and Liquidated Damages (Form 1100A)
  - p. Contractor Evaluation (Form 1182)
  - q. Reduction in Reserve, and
  - r. Other records and/or reports as required for the Project by the PEM and/or as required by Specifications, Plans, Proposal, the Michigan Construction Manual, the Materials Sampling Guide, and other applicable references, guidelines, and/or procedures manuals.
- 5. **Reports-Contractor Generated:** Provide the PEM and assist in the review, process, and/or approve Construction Contractor submittal of records and reports required by the Department as applicable to the projects which may include, but not limited to:
  - a. Working Drawings
  - b. Weekly Employment Reports, Certified Payrolls (Form 1199)
  - c. Contractor=s claims for additional compensation and extension(s) of time, and
  - d. Other reports and records as required for the individual Project by the PEM.
- 6. **Project Files:** Provide all necessary files to the Department personnel for the Department to maintain project files in accordance with the MDOT File Manual and Departmental procedures, to supply to the Department for the project files. Project files will be maintained in the Detroit Transportation Service Center by Department office personnel. The Vendor shall copy select correspondence and documentation, which require the PEM attention or action.

## E. For Finaling All Project Documentation, the Vendor shall:

- 1. **Final Measure and Summarize:** Final field measure applicable items of work. Prepare final summaries for applicable items of work.
- 2. **Project Review/Certification:** Participate in and make recommendation to resolve items determined to be insufficient during the Department=s review(s) of project records prior to submittal of the Final Estimate.
  - Within 30 calendar days of the actual project completion date, the project records shall be submitted to the Department to prepare for the Final Records Review.
- 3. **Final Documents:** Assist the Department in preparing the Final Estimate, Final Quantity Sheets, Final Marked As-Constructed Plans, and the Design/Construction Package Evaluation (Form 285-2).

## **SERVICES TO BE PERFORMED BY THE DEPARTMENT:**

- A. The PEM shall furnish to the Vendor Project-specific construction contracts, proposals, plans, plan revisions, written instructions, and other information and/or data as deemed necessary by the PEM for the Services required herein.
- B. The Department shall furnish off-site aggregate testing, off-site inspections and tests of steel, cement, bituminous mixture designs, sewer and drainage pipe, structural steel, prestressed girders and beams, traffic signs, and any other materials customarily tested in the Department laboratories with its own forces or by statewide contracts. The customary testing is described in the Materials Quality Assurance Manual with exceptions noted within the Specifications, Plans, and Proposal. The Vendor may be asked to assist in the sampling and transportation of all the materials (including off-site) to be tested by Department personnel.
- C. The PEM shall provide general monitoring and quality auditing inspection of the projects to assure that the projects have been completed in reasonable conformance with the plans and specifications for Project Acceptance and to determine that the work performed to date by the Vendor for Services rendered is reasonable and appropriate before approving the Vendor=s requests for progress payments.
- D. The Department shall provide the bituminous plant inspection required for Quality Assurance and will submit the applicable QA test reports to the PEM. The Vendor may be requested to analyze and recommend any further action. The Vendor shall be requested to assist with on-site bituminous inspection required, including, but not limited to, locating the required Quality Assurance loose samples and cores, coordinating with the Contractor regarding this sampling, and transporting these samples.
- E. The Department shall perform any necessary soil borings and subsurface investigations throughout the project.

- F. The PEM and/or other Department staff will arrange and conduct the Preconstruction and weekly progress meetings and prepare and distribute the meeting minutes. The Vendor shall be requested to assist with these duties as deemed necessary by the PEM.
- G. The Department may have a Contractor supplied site office for use by Vendor and Department personnel on specific sites. The primary office site for Vendor personnel shall be the Detroit TSC.

## **VENDOR PAYMENT:**

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines found on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Vendor for Services rendered shall not exceed the "Cost Plus Fixed Fee Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Vendor. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Fixed fee on "as needed" projects is computed by taking the percent of actual labor hours invoiced to labor hours authorized, then applying that percentage to the total fixed fee authorized. Maximum fixed fee is 11%.

Direct expenses will not be paid in excess of that allowed by the Department for its own employees. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the Construction Engineering activities of this Project. Hours spent in vendor administrative, clerical, or accounting roles for billing and support, are not considered allowable hours; there will be no reimbursement for these hours.

Reimbursement for overtime hours will be limited to time spent on any combination of projects assigned to the PEM in excess of forty hours per week, in a Sunday through Saturday week (no other combinations). Overtime worked is not required to be paid unless the PEM approves it before the overtime is worked. It is expected that overtime hours will be required on the projects. Overtime worked without the prior knowledge and approval of the PEM is justification for non payment for the overtime worked. The maximum amount of overtime allowed by any Vendor staff on this solicitation is thirty percent (30%) of the total hours worked. Any variations to this rule should be included in the price proposal.

The hours billed for the inspector will not begin until the inspector reports to the project site, the Detroit TSC office, or the project site office. Timesheets shall be submitted to the PEM biweekly for approval by signature and a copy provided to the PEM, after PEM signature.

In addition to the above requirements, when each Vendor bill/invoice is submitted, the following table will be required:

- -Construction contract time elapsed to date (percent vs. total construction contract time)
- -Construction contractor revenue earned to date (per cent vs. total construction contract value)
- -Vendor billings to date (per cent vs. total Vendor contract value)

In addition, a graph of these three parameters will be required. The X-axis shall have true calendar time as its ordinate and the Y-axis shall have all three >per cents= plotted. The limits of the Y-axis shall be zero to 110. Prior to submitting the first Vendor invoice, the PEM shall approve the format of the table and graph.